Technical Standards: Machine Tool

Students will understand the various machine tools and perform basic operations, be able to use hand tools and precision measuring equipment, be familiar with safety issues, and be familiar with Career opportunities. Employability skills, leadership and professionalism will be provided through SkillsUSA-VICA and the Professional Development Program. The student will:

Indicator A:

Become familiar with and demonstrate various aspects of safety relating to machine tool technology.

Indicator B:

Demonstrate the ability to perform mathematical calculations.

Indicator C:

Demonstrate the ability to perform measurements and the reading of blueprints.

Indicator D:

Be able to perform the inspections process and the quality control.

Indicator E:

Demonstrate the ability to layout a project and perform bench work.

Indicator F:

Became familiar with the science of materials.

Indicator G:

Demonstrate the ability to safely and properly operate power saws and drill presses.

Indicator H:

Demonstrate the ability to perform the operations of a lathe.

Indicator I:

Demonstrate the ability to perform the operations of a milling machine.

Indicator J:

Demonstrate the ability to operate a grinder and properly grind tools and cutters.

Indicator K:

Demonstrate the ability to operate an Electric Discharge Machine (EDM).

Indicator L:

Demonstrate the ability to safely operate Computerized Numerical Control (CNC) machine.

Indicator M:

Develop personal and professional skills through involvement with the SkillsUSA-VICA student organization activities.